

VECTOR REGISTER FILE WITH ARBITRARY

VECTOR ADDRESSING

ABSTRACT OF THE DISCLOSURE

5 A system and method for processing operations that use
data vectors each comprising a plurality of data elements,
in accordance with the present invention, includes a vector
data file comprising a plurality of storage elements for
storing data elements of the data vectors. A pointer array
10 is coupled by a bus to the vector data file. The pointer
array includes a plurality of entries wherein each entry
identifies at least one storage element in the vector data
file. The at least one storage element stores at least one
data element of the data vectors, wherein for at least one
15 particular entry in the pointer array, the at least one
storage element identified by the particular entry has an
arbitrary starting address in the vector data file.